

Dangerous Tree Checklist for Qualified Persons

(a person, who, by reason of education, training, experience or a combination thereof, can identify trees that are dangerous for a Low or Level 1 disturbance and also “suspect” trees that can be pointed out to certified assessors for higher level disturbance work activities)

Protect large trees and avoid creating a Dangerous Tree:



Roots: Keep construction equipment and building materials out of a tree's drip line, the area from trunk to outermost branches.



Fences/guards: Protect trunk or larger limbs from physical damage by fencing (orange safety fence or 2x4 railings)



Excavations and fill: If dirt must be moved in a site near trees, cover a tree's drip line with no more than 4 to 5 inches of coarse topsoil. During excavations within the drip line, ensure minimizing laying bare, contacting, or undermining larger roots.



First aid: If leaves on a construction site tree begin dying, do not fertilize. Aerate the soil and water it for the duration of the project. If half a tree's roots are damaged, half its leaves will die.



Access roads: If paths will cross tree roots, use brick pavers over sensitive areas so air, water and nutrients can penetrate.



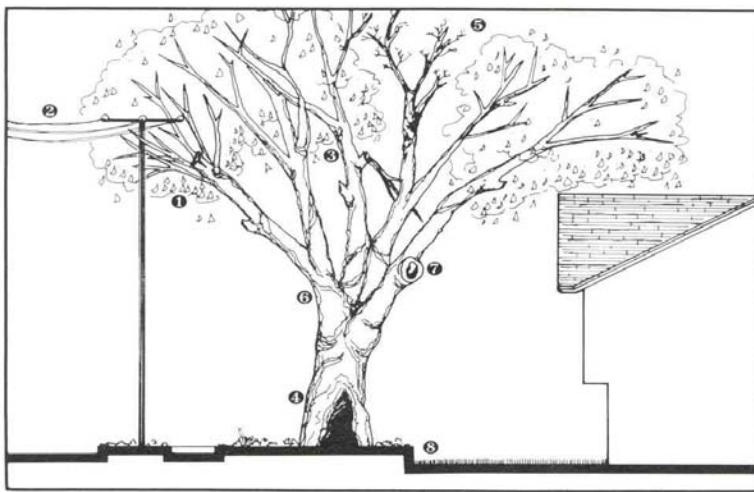
Tree treatments: Avoid topping trees and large branches; prune branches smoothly near the trunk.

Qualified Person Procedure – Identify Dangerous Trees by:

1. **Telltale Signs** (significant tree hazards) that a tree may be a dangerous tree are:
 - **insecurely lodged trees, or hung-up limbs or tops** (consider size and height above ground)
 - **highly decadent or unstable** (e.g. >50% cross-sectional area stem damage, or >50% lateral roots damaged or unsound)
 - **recent high lean** (>15% toward work area) **AND damaged root system / anchoring soil layer**
 - **a combination of the above**
2. **Suspect Trees.** A suspect tree in this case would be tree that the worker suspects may fail but does not meet the criteria of the “Telltale Signs”.
3. **Tree Assessment Tags**
4. **Reviewing Public Areas**
 - a) Assess the road area in relation to trees within 1-½ tree lengths.
 - b) Look for any of the Telltale Signs that a tree may be dangerous.
 - c) If none are present, no further assessment is required. If one or more is present, schedule the tree for assessment by a Certified Assessor to determine reasonable remedial actions or removal.
5. **Reviewing Trees within Work Areas**
 - a) Look for any of the Telltale Signs that a tree may be dangerous. If one or more is present go to Step b).

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- b) Determine if failure of the limb, top or tree would threaten the work area. If it falls, where is it going to land? If it will not land in the work area, then no further action is required. If it will land in the work area, then go to Step c).
- c) Determine if it can be removed prior to work. If it can be removed, consider removal. Remember that trees near waterways and containing nests may be protected. Speak to the Ministry's Environmental Advisor before removing these trees. If it cannot be removed, go to Step d).
- d) Can workers be protected by implementing a "No-Work Zone (NWZ)" or physically protecting workers with equipment or barriers?
 - If YES, implement protection and ensure all workers are aware of the hazard and safe work procedures. Note that heavy wind, rain or snow will affect the stability of the tree and work must cease in the area during such events.
 - If NO, call the District Office to get an assessment by a Certified Assessor, who can more accurately determine the stability of the tree and can assist in developing appropriate safe work procedures. Move this picture below number 2 in support of looking for "suspect trees".



Examples of defects present in urban trees...

1. Re-growth from topping, line clearance or other pruning
2. Electrical line adjacent to tree
3. Broken or partially attached branch
4. Open cavity in trunk or branch
5. Dead or dying branches
6. Branches arise at one point on the trunk
7. Decay and rot present in old wounds
8. Recent change in grade, soil level or other construction

Identify Assessed Trees

Supervisors must assess the work area or get a "Qualified Person" to assess the work area for potential hazards, including potentially unstable (dangerous) trees, and control these prior to initiating any work activity. **Workers** must also take reasonable steps to ensure safety of the worksite and follow safe procedures.



Certified Tree Assessment Tags or other effective means of identification are to be attached to trees on sites assessed by a Certified Wildlife/Dangerous Tree Assessor on behalf of the Ministry. ALL assessments are to be kept onsite during the project with copies provided to the District. If a Tree Assessment Tag is located within 1-½ tree lengths of a work area, contact the District to determine if it is safe to work near the tree. Determining whether a tree is "safe" for your specific activities must be done in consultation with the district. **Note:** *Danger tree assessments are only reliable under unremarkable weather conditions, typically in the spring to fall seasons.* **Assessments & Telltale Signs**

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criteria are invalid during abnormally severe weather events and worker exposure must be minimized or eliminated during those times.

Establish Control Measures

Any tree that may become unstable during the work process must be removed or its potential failure controlled. No work shall be conducted in a work area that can be impacted by the failure of a known dangerous tree until some control measure is implemented.

Remedial actions may include:

- immediate removal in whole or part
- ongoing monitoring
- scheduled removal at the next practicable opportunity
- establishing "no-work zones"
- effective protection by another means (e.g. engineered hoarding)
- immediate removal of the dangerous limb, top or tree.

No-Work Zones (NWZ) of the appropriate size and shape (generally 1-½ times the height of the tree or length of the dangerous part, allowing for root/stump kickback and extended downhill as required) are to ensure safety during a tree failure.

Further Information

Further information can be located in our *Health & Safety in the Workplace* Manual @ <http://gww.th.gov.bc.ca/gwwhsmanuals/Content/Home/Home.asp>

For information on safety when working around power lines refer to Section 2.7.2 of the *Health & Safety in the Workplace* Manual @ <http://gww.th.gov.bc.ca/gwwhsmanuals/Content/FieldOps/Section2.7/2.7.2.asp>

Should you have any questions, contact your Regional Safety Advisor or the Health & Safety Section @ (250) 356-8213.

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